REMARKS

Reconsideration of this application, as presently amended, is respectfully requested. Claims 1-15 are pending in this application. Claims 1-4 and 12-15 stand rejected. Claims 5-11 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form to include all of the features of the base claim and any intervening claims.

Objection to the Specification

The Examiner objects to the Amendment filed on February 10, 2006 under 35 U.S.C. §132(a) because it allegedly introduces new matter into the disclosure (35 U.S.C. §132(a) states that no amendment shall introduce new matter into the disclosure of the invention). More particularly, the Office Action asserts that the recitation "light-load state", which was added to claims 1, 3, 12, 13, 14 and 15 by the February 10, 2006 Amendment, is not supported by the original disclosure. By way of example, claim 1 recites "stopping a power supply to the transformer when an output side of the current-to-voltage conversion circuit is in a no-load state or a ***light-load state***". Claims 3, 12, 13, 1 4 and 15 recite the invention similarly.

Each of claims 1, 3, 12, 13, 14 and 15 has been amended to change "a light-load state" to --a standby state--. Support for this change is provided in the application specification, e.g., page 20, lines 9-13, which state "For this reason, when the electronic apparatus 100 is in *the standby state* or the stopped state, the standby power can be made zero by completely *stopping the operation of the AC adapter 101*." [emphasis added] It is noted that the electronic apparatus 100

is connected to the output side of the AC adapter 101 (see, e.g., Fig. 5 and page 19, lines 4-6 and 21-23).

It is believed that the amendment to the claims to change "light-load state" to --standby state-- obviates the objection to the specification for introducing new matter. Reconsideration and withdrawal of the objection are respectfully requested.

Claim Rejections – 35 U.S.C. §102

Claims 1-4 and 12-15 are rejected under 35 U.S.C. §102(a) as being anticipated by **Bruning** (USP 6,339,314, previously cited). For the reasons set forth in detail below, this rejection is respectfully traversed.

Initially, it is noted that the independent claims have been amended to clarify the invention. Using claim 1 as exemplary, claim 1 has been amended to recite "starting a power supply to the transformer when ~~an external~~ a voltage from external of the current-to-voltage conversion circuit is applied to the output side of the current-to-voltage conversion circuit." This amendment has been made to clarify that the "external voltage" is a voltage supplied externally of the current-to-voltage conversion circuit. Support for this amendment is provided, for example, on page 19, line 36 – page 20, line 2 of the specification, which states "When the switching circuit FET31 is turned ON in a state where the AC adapter 101 is in the OFF state, the power supply voltage from the secondary battery 111 is applied to the output side of the AC adapter 101, to put the AC adapter 101 in the ON state."

Furthermore, it is noted that the current ***non-final*** Office Action is ***exactly*** the same as the final Office Action mailed March 29, 2006. The final Office Action mailed March 29, 2006 was addressed in the Amendment under 37 C.F.R. §1.116 filed on June 13, 2006. It is also noted that the patentability arguments set forth in the Amendment under 37 C.F.R §1.116 filed on June 13, 2006 were not addressed because of the circumstances of the prosecution. Specifically, an Advisory Action was issued on June 28, 2006 in response to the Amendment under 37 C.F.R. §1.116 filed on June 13, 2006 in which the Examiner simply asserted that the arguments presented in this Amendment were not considered persuasive (the Examiner also asserted in the Advisory Action that amendments to claims 14 and 15 raised new issues requiring further consideration and/or search). A Request for Continued Examination (RCE) was filed on July 26, 2006 in which the unentered amendments to claims 14 and 15 were submitted for entry and in which it was requested that the Examiner address the arguments traversing the rejection over **Bruning** presented in the Amendment under §1.116 filed on June 13, 2006.

However, in response to the RCE, the Examiner issued a first non-final Office Action dated August 9, 2006 in which the rejection in view of **Bruning** was withdrawn, and claims 1-4 and 12-15 were rejected under §102 as being anticipated by **Ohyama**. The rejection of claims 1-4 and 12-15 as anticipated by **Ohyama** was traversed in the Request for Reconsideration filed on October 30, 2006, without further amending the claims.

It is believed that the arguments traversing the rejection over **Bruning** presented in the Amendment under §1.116 filed on June 13, 2006 are substantially applicable to the presently

amended claims. Accordingly, these arguments are reiterated to the extent they apply to the present claims.

First, the patentability arguments below address the Examiner's ***Response to Arguments*** set forth on pages 3 and 4 of the current Office Action.

Claims 1 and 3

As will be set forth in detail below, it is respectfully submitted that claims 1 and 3 recite at least the following features that are patentable over the **Bruning** reference: (1) "*starting a power supply to the transformer when a voltage from external of the current-to-voltage conversion circuit is applied to the output side of the current-to-voltage conversion circuit*" (**claim 1**); and (2) "*a second circuit to start a power supply to the transformer and put the current-to-voltage conversion circuit into an active state when a voltage from external of the current-to-voltage conversion circuit is applied to the output section*" (**claim 3**).

In the ***Response to Arguments***, the Examiner asserts:

> "Applicant argues that **Bruning** reference does not disclose or suggest [a] starting a power supply to the transformer when an external voltage is applied to the output side of the current-to-voltage conversion circuit, see col. 1, line 67 to col. 2, line 2, a threshold detector is coupled to the triggerable electronic switch [to] trigger the triggerable electronic switch when the voltage of the threshold detector reaches a predetermined value (***i.e. an external voltage is applied to the conversion circuit***)." See Office Action, page 3, lines 7-12.

First, it is respectfully submitted that the Examiner's ***Response to Arguments*** does not take into account that the claimed "starting a power supply to the transformer" occurs "***when an***

external voltage is applied to the ***output side*** of the current-to-voltage conversion device." (As noted above, the claims have been amended to further clarify "when a voltage *from external of the current-to-voltage conversion circuit* is applied to the output side of the current-to-voltage conversion circuit").

More specifically, the portion of the **Bruning** reference cited by the Examiner in the ***Response to Arguments*** relates to a triggerable electronic switch 22 that, when triggered, allows current to be supplied to the primary winding 40 of transformer 20 via power supplied to input terminals 12, 14. In other words, the portion of **Bruning** cited by the Examiner teaches supplying power to the transformer 20 when ***external power*** is supplied to ***the input side*** of the transformer.

In particular, **Bruning** discloses a triggerable electronic switch 22 that controls current supplied to transformer 20 based on whether the triggerable electronic switch is in an ON or OFF state (see col. 3, lines 46-53). The triggerable electronic switch 22 includes a triac 46 that is triggered by a triggering circuit 28. The triggering circuit 28 includes, among other components, a capacitive element 60 and a ***threshold*** device 58. The capacitive element 60 charges ***when power is supplied to the input terminals*** 12, 14. Once the voltage of the capacitive element 60 reaches a predetermined value, the threshold device 58 turns ON or conducts. The threshold device 58 controls triggering of the triac 46 of triggerable electronic switch 22 to supply current to the primary winding 40 of transformer 20. See, e.g., col. 4, lines 8-46.

Thus, it is clear that the threshold detector and triggerable electronic switch described in col. 1, line 67 – col. 2, line 2 of **Bruning** control power supplied to the primary winding 40 of

transformer 20 when an external voltage is applied to the input terminals 12, 14. Contrary to the present invention, **Bruning** do not disclose or suggest "*starting a power supply to the transformer when a voltage from external of the current-to-voltage conversion circuit is applied to the output side of the current-to-voltage conversion circuit*", as recited in claim 1 (and similarly in claim 3).

Claims 12 and 13

As will be discussed in detail below, it is respectfully submitted that claims 12 and 13 recite at least the following features that are patentable over the **Bruning** reference: (1) "*said current-to-voltage conversion circuit assuming ...an active state when a voltage from external of the current-to-voltage conversion circuit is applied to the output side, said electronic apparatus comprising: a switching circuit to apply the voltage from external to the current-to-voltage conversion circuit to the output side of the current-to-voltage conversion circuit in the deactivated state*" (**claim 12**), and (2) "*a second circuit to start a power supply to the transformer and put the current-to-voltage conversion circuit into an active state when a voltage from external of the current-to-voltage conversion circuit is applied to the output section; and a control section to apply the voltage from external of the current-to-voltage conversion circuit to the output section of the current-to-voltage conversion circuit in the deactivated state*" (**claim 13**).

On page 11, lines 3-5 of the Amendment filed on February 10, 2006, it was argued "With respect to independent claims 12 and 13, **Bruning** does not disclose or suggest applying an

external voltage to the output side of the current-to-voltage conversion circuit in the deactivated state to control the output side to the active state." However, the Examiner has **not** addressed these patentability arguments in the ***Response to Arguments***.

As indicated above, **Bruning** does not disclose or suggest a system wherein a voltage from ***external of a current-to-voltage conversion section*** is applied to the ***output side or output section*** of the current-to-voltage conversion circuit to activate the current-to-voltage conversion circuit. More particularly, in order to restart the power supply to the transformer in **Bruning**, it is necessary to continue supplying power to the load because the restart is made by the load current. However, in accordance with the present invention, it is simply necessary to apply the voltage from external of the current-to-voltage conversion section to the output side of the current-to-voltage conversion circuit in order to restart the power supply to the transformer, and a more stable start procedure can be realized.

Claims 14 and 15

Claims 14 and 15 recite that the no-load or standby state is detected by detecting a state of the output side of the current-to-voltage conversion circuit. For example, in accordance with the present invention, the no-load or standby state is detected by detecting current in the secondary side circuit of the transformer (i.e., the output side). In contrast, the **Bruning** device detects current in the primary winding of the transformer to detect a no-load state. Therefore, it is respectfully submitted that **Bruning** do not disclose or suggest "stopping a power supply to the transformer when the output side of the current-to-voltage conversion circuit is in the no-load

state or the light-load state, wherein the no-load state or light-load state is detected by detecting a state of the output side of the current-to-voltage conversion circuit", as presently recited in claim 14 (and similarly in claim 15). As noted above, the **Bruning** device detects current in the primary winding, or input side, of the transformer to detect a no-load state.

For all of the reasons set forth above, it is respectfully submitted that each of claims 1-4 and 12-15 patentably distinguish over the cited prior art and define allowable subject matter. Accordingly, reconsideration and withdrawal of the rejection under §102 are respectfully requested.

CONCLUSION

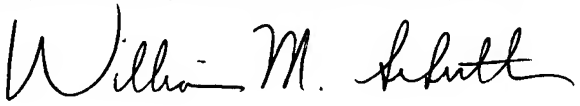
In view of the foregoing amendments and accompanying remarks, it is submitted that all pending claims are in condition for allowance. A prompt and favorable reconsideration of the rejection and an indication of allowability of all pending claims are earnestly solicited.

If the Examiner believes that there are issues remaining to be resolved in this application, the Examiner is invited to contact the undersigned attorney at the telephone number indicated below to arrange for an interview to expedite and complete prosecution of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP



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